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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/521,693	09/12/2005	Ben Adler	I-2002.011 US	8800
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PATENT DEPARTMENT
PO BOX 318
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EXAMINER

GANGLE, BRIAN J

ART UNIT	PAPER NUMBER
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1645

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/521,693	Applicant(s) ADLER ET AL.	
	Examiner Brian J. Gangle	Art Unit 1645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-8, 19-22 and 24-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 5-8, 19-22 and 24-45 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 5-6, 8, 24-26, and 35, drawn to nucleic acids encoding a 61kD *Brachyspira hyodysenteriae* lipoprotein and to diagnostic kits, host cells, and vaccines comprising said nucleic acid.

Group II, claim(s) 7 and 35, drawn to a live recombinant carrier comprising a nucleic acids encoding a 61kD *Brachyspira hyodysenteriae* lipoprotein.

Group III, claim(s) 19-20, drawn to vaccines against *Brachyspira hyodysenteriae* comprising antibodies against a 61kD *Brachyspira hyodysenteriae* lipoprotein.

Group IV, claim(s) 21-22, in part, drawn to vaccines against *Brachyspira hyodysenteriae* comprising antibodies against a 61kD *Brachyspira hyodysenteriae* lipoprotein and an antigen from another swine pathogen.

Group V, claim(s) 21-22, in part, drawn to vaccines against *Brachyspira hyodysenteriae* comprising antibodies against a 61kD *Brachyspira hyodysenteriae* lipoprotein and antibodies against an antigen from another swine pathogen.

Group VI, claim(s) 21-22, in part, drawn to vaccines against *Brachyspira hyodysenteriae* comprising antibodies against a 61kD *Brachyspira hyodysenteriae* lipoprotein and genetic information encoding an antigen from another swine pathogen.

Group VII, claim(s) 24, 29-30, and 33, in part, drawn to a 61kD *Brachyspira hyodysenteriae* lipoprotein and to diagnostic kits and vaccines comprising said lipoprotein.

Group VIII, claim(s) 24, in part, drawn to a diagnostic kit comprising antibodies against a 61kD *Brachyspira hyodysenteriae* lipoprotein.

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Group IX, claim(s) 27-28, 36-38, and 40-41, drawn to nucleic acids encoding a 20kD *Brachyspira hyodysenteriae* lipoprotein and to diagnostic kits, host cells, and vaccines comprising said nucleic acid.

Group X, claim(s) 36 and 39, drawn to a live recombinant carrier comprising a nucleic acids encoding a 20kD *Brachyspira hyodysenteriae* lipoprotein.

Group XI, claim(s) 31-32 and 34, in part, drawn to a 20kD *Brachyspira hyodysenteriae* lipoprotein and to diagnostic kits and vaccines comprising said lipoprotein.

Group XII, claim(s) 41, in part, drawn to a diagnostic kit comprising antibodies against a 20kD *Brachyspira hyodysenteriae* lipoprotein.

Group XIII, claim(s) 42-43, drawn to vaccines against *Brachyspira hyodysenteriae* comprising antibodies against a 20kD *Brachyspira hyodysenteriae* lipoprotein.

Group XIV, claim(s) 44-45, in part, drawn to vaccines against *Brachyspira hyodysenteriae* comprising antibodies against a 20kD *Brachyspira hyodysenteriae* lipoprotein and an antigen from another swine pathogen.

Group XV, claim(s) 44-45, in part, drawn to vaccines against *Brachyspira hyodysenteriae* comprising antibodies against a 20kD *Brachyspira hyodysenteriae* lipoprotein and antibodies against an antigen from another swine pathogen.

Group XVI, claim(s) 44-45, in part, drawn to vaccines against *Brachyspira hyodysenteriae* comprising antibodies against a 61kD *Brachyspira hyodysenteriae* lipoprotein and genetic information encoding an antigen from another swine pathogen.

Election Requirement Applicable to Groups III-V and XII-XIV

In addition, Groups IV-VI and XIV-XVI, detailed above, read on patentably distinct pathogens. Each pathogen is patentably distinct because they are drawn to organisms with differing biochemical and immunological properties and a further restriction is applied to Groups IV-VI and XIV-XVI. Applicant must further elect a single pathogen from claims 22 and 45.

Applicant is advised that examination will be restricted to only the elected pathogen and should not be construed as a species election.

The inventions listed as Groups I-XVI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

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There appears to be no special technical feature linking Groups I-XVI. The technical feature linking Groups I-VIII appears to be a 61kD *Brachyspira hyodysenteriae* lipoprotein and the technical feature linking Groups IX-XVI appears to be a 20kD *Brachyspira hyodysenteriae* lipoprotein.

However, Joens *et al.* (Infect. Immun., 54:893-896, 1986) disclose both 61kD and 20kD proteins isolated from *Treponema* (now known as *Brachyspira*) *hyodysenteriae* (see figure 1). As both of these proteins are found naturally in *Brachyspira hyodysenteriae* and both proteins are of the same molecular weight as those disclosed by Joens *et al.*, in the absence of evidence to the contrary, the proteins claimed by applicant are deemed to be the same as those disclosed by Joens *et al.*

Therefore, the technical features linking the inventions of groups I-VII and VIII-XIV do not constitute a special technical feature as defined by PCT Rule 13.2, as they do not define a contribution over the art.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

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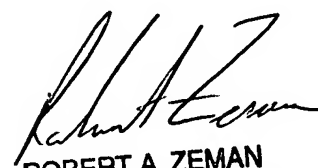
Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Gangle whose telephone number is (571) 272-1181. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Mark Navarro can be reached on (571) 272-0861. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian Gangle
AU 1645



ROBERT A. ZEMAN
PRIMARY EXAMINER